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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/831,694	07/19/2001	Yushi Ihara	450101-02708	9558
20999	7590	03/14/2005	EXAMINER	
FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			DIVINE, LUCAS	
			ART UNIT	PAPER NUMBER
			2624	

DATE MAILED: 03/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/831,694

Applicant(s)

IHARA, YUSHI

Examiner

Lucas Divine

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 19 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/10/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 3 and 6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Claims 3 and 6 include the limitation '**setting the data quantity of image data**' for example on page 63 line 15. This data 'data quantity of image data' has not been defined in the specification in such a way as to reasonably convey to one skilled in the relevant art what is being referred to.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 3 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 3 and 6 include the limitation '**setting the data quantity of image data**' for example on page 63 line 15. Examiner does not understand what '**data**' refers to, whether or not it is the image data for the blank image or the image data for the other image pages for the sheet or the entire image data for the whole sheet or some other data that is not expressly pointed out. Further, it is unclear and indefinite as to what the applicant is claiming by this limitation in both claims 3 and 6 and the claims are therefore rejected under 35 U.S.C. 112, second paragraph.

Art Unit: 2624

3. Claims 3 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 3 and 6 include the limitation '**setting the data quantity of image data**' for example on page 63 line 15. Examiner does not understand what '**quantity**' refers to. Examples of data quantity values in the printing art include # of pixels, # of bytes of the image data, # of packets the data needs for transmission, # of data in each packet, the pixel value numbers for printing, the color data quantities for each pixel, the quantity of data pages being printed, or another quantity of which the Examiner is not aware. Further, it is unclear and indefinite as to what the applicant is claiming by this limitation in both claims 3 and 6 and the claims are therefore rejected under 35 U.S.C. 112, second paragraph.

4. Claims 3 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 3 and 6 include the limitation '**setting the capture command value indicating that the image type of the image data is not considered**' for example on page 63 line 17. Examiner does not understand how the image type is not considered. In receiving a command for printing, the commands (including capture) are considered, thus the image type must be considered in order to process the command. It would appear that if the image type is a certain way (blank page), then the image data should not be considered, not the image type. It is unclear and indefinite as to what the applicant is claiming by this limitation in both claims 3 and 6 and the claims are therefore rejected under 35 U.S.C. 112, second paragraph. Clarification of this issue is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2, 4, 5, and 7 – 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori (US 6411400) in view of Fukunaga et al. (US 6603737) hereafter referred to as Mori and Fukunaga.

Regarding claim 1, Mori teaches **an image processing device** (host computer 300 as shown functionally in Figs. 2 and 3) **comprising:**

image processing means (CPU 1; col. 4 lines 51-53) **for performing image processing on an image signal inputted from outside** (image data can be inputted from external memory 11 for print preparation) **and generating image data** (graphic engine 202 as shown in Fig. 3 is controlled by the CPU and takes an image signal and rasterizes it into image data for printing and then sends the data to the printer driver 203; col. 4 line 54 and col. 6 lines 42-44);

control information generation means (printer driver 203; col. 6 lines 25-27) **for generating control information** (control commands for the printer discussed in col. 6 lines 48-51) **including information indicating the number of print images on one page of a print sheet** (F11 in Fig. 9 shows a clear example of information indicating the number of print images on one page; col. 9 lines 38-52, wherein N is the number of print images on one page); **and**

output means (system spooler 204 as shown in Fig. 3 outputs image data and control information to the printer for controlling the printing of the printer, wherein the actual physical

Art Unit: 2624

device sending the data over the interface 21 is the printer controller 8) **for including the image data generated by the image processing means and the print control information generated by the control information generation means and outputting to a printing device** (outputting data to the printer; col. 1 lines 55-56);

the control information generation means generating print control information including information which includes a blank image in the image to be printed on the print sheet (Fig. 8 step 3, Fig. 10 spaces SP11, SP12, SP13, SP14, Fig. 11, Fig. 13; col. 1 lines 56-57 and throughout – in the invention of Mori, a user can select to include blank pages along with image pages in order to allow for notes to be taken, this blank page can be completely blank or have blank spaces in it as shown in Fig. 11, this blank page information then must be sent along with the rest of the print job to be printed on the sheet [examples shown in Fig. 10 and 12]).

While Mori teaches the sending of data to and from a printer in Fig. 2 through a predetermined communication medium [col. 1 line 12] bi-directional [col. 5 line 17] interface 21, Mori does not specifically teach that this interface be **the IEEE (the Institute of Electrical and Electronics Engineers) 1394 standard which utilizes packets for sending data**.

Fukunaga teaches interfacing between a computer and a printer via **the IEEE 1394 standard** (Fig. 1A; col. 1 lines 42-50) **which utilizes packets for sending data** (packet example shown in Fig. 13).

It would have been known obvious to one of ordinary skill in the art to use the IEEE 1394 standard as the interface of Mori. The motivations for doing so include the facts that IEEE 1394 is fast, smart, and an industry standard. Because it is an industry standard, it would be advantageous for an inventor to include its functionality in order for the invention to

Art Unit: 2624

communicate with other devices on the market. Further, since it is an industry standard, it is well adopted by large companies and would have been well known to those of ordinary skill in the art.

Regarding claim 2, the apparatus elements of Mori in view of Fukunaga as combined as obvious in the rejection of claim 1 perform all of the method steps of method claim 2. Thus, claim 2 is rejected for the same reasons as stated in the rejection of claim 1 above.

Regarding claim 4, Mori teaches a **printing device** (printer 1500 shown physically in Fig. 1 and functionally in Fig. 2) **comprising:**

input means (input section 18, which accepts print data and printer control information from the host computer) **to which image data and print control information including information the number of pages on one page of a print sheet** (F11 in Fig. 9 shows a clear example of information indicating the number of print images on one page; col. 9 lines 38-52, wherein N is the number of print images on one page) **and information indicating the inclusion of a blank image in the image to be printed on the print sheet** (Fig. 8 step 3, Fig. 10 spaces SP11, SP12, SP13, SP14, Fig. 11, Fig. 13; col. 1 lines 56-57 and throughout – in the invention of Mori, a user can select to include blank pages along with image pages in order to allow for notes to be taken, this blank page can be completely blank or have blank spaces in it as shown in Fig. 11, this blank page information then must be sent along with the rest of the print job to be printed on the sheet [examples shown in Fig. 10 and 12]) **are inputted; and**

printing means for printing an image represented by the image data inputted to the input means in accordance with the print control information (printer engine 17 performs the actual printing in accordance with print information; col. 5 lines 61-62);

the printing means setting an image area to be printed on the print sheet as a blank area in the case where the print control information including information indicating inclusion of a blank page is inputted (print sheet including blank page is shown in Figs. 6, 10, and 12 in the cases where blank page information is inputted).

While Mori teaches the sending of data to and from a printer in Fig. 2 through a predetermined communication medium [col. 1 line 12] bi-directional [col. 5 line 17] interface 21, Mori does not specifically teach that this interface be **the IEEE (the Institute of Electrical and Electronics Engineers) 1394 standard which utilizes packets for sending data**.

Fukunaga teaches interfacing between a computer and a printer via **the IEEE 1394 standard** (Fig. 1A; col. 1 lines 42-50) **which utilizes packets for sending data** (packet example shown in Fig. 13).

It would have been known obvious to one of ordinary skill in the art to use the IEEE 1394 standard as the interface of Mori. The motivations for doing so include the facts that IEEE 1394 is fast, smart, and an industry standard. Because it is an industry standard, it would be advantageous for an inventor to include its functionality in order for the invention to communicate with other devices on the market. Further, since it is an industry standard, it is well adopted by large companies and would have been well known to those of ordinary skill in the art.

Regarding claim 5, the apparatus elements of Mori in view of Fukunaga as combined as obvious in the rejection of claim 4 perform all of the method steps of method claim 5. Thus, claim 5 is rejected for the same reasons as stated in the rejection of claim 4 above.

Regarding claim 7, Mori teaches **an image printing system** (Fig. 2) comprising:

an image processing device (host computer 300 as shown functionally in Figs. 2 and 3) **including**

image processing means (CPU 1; col. 4 lines 51-53) **for performing image processing on an image signal inputted from outside** (image data can be inputted from external memory 11 for print preparation) **and thus generating image data** (graphic engine 202 as shown in Fig. 3 is controlled by the CPU and takes an image signal and rasterizes it into image data for printing and then sends the data to the printer driver 203; col. 4 line 54 and col. 6 lines 42-44);

control information generation means (printer driver 203; col. 6 lines 25-27) **for generating control information** (control commands for the printer discussed in col. 6 lines 48-51) **including information indicating the number of print images on one page of a print sheet** (F11 in Fig. 9 shows a clear example of information indicating the number of print images on one page; col. 9 lines 38-52, wherein N is the number of print images on one page); **and**

output means (system spooler 204 as shown in Fig. 3 outputs image data and control information to the printer for controlling the printing of the printer, wherein the actual physical device sending the data over the interface 21 is the printer controller 8) **for including the image data generated by the image processing means and the print control information generated by the control information generation means and outputting to a printing device** (outputting data to the printer; col. 1 lines 55-56);

the control information generation means generating print control information including information which includes a blank image in the image to be printed on the print sheet (Fig. 8 step 3, Fig. 10 spaces SP11, SP12, SP13, SP14, Fig. 11, Fig. 13; col. 1 lines 56-57 and throughout – in the invention of Mori, a user can select to include blank pages along with

Art Unit: 2624

image pages in order to allow for notes to be taken, this blank page can be completely blank or have blank spaces in it as shown in Fig. 11, this blank page information then must be sent along with the rest of the print job to be printed on the sheet [examples shown in Fig. 10 and 12]); **and**

a printing device (printer 1500 shown physically in Fig. 1 and functionally in Fig. 2) **including**

input means (input section 18, which accepts print data and printer control information from the host computer) **to which image data and print control information including information the number of pages on one page of a print sheet** (F11 in Fig. 9 shows a clear example of information indicating the number of print images on one page; col. 9 lines 38-52, wherein N is the number of print images on one page) **and information indicating the inclusion of a blank image in the image to be printed on the print sheet** (Fig. 8 step 3, Fig. 10 spaces SP11, SP12, SP13, SP14, Fig. 11, Fig. 13; col. 1 lines 56-57 and throughout – in the invention of Mori, a user can select to include blank pages along with image pages in order to allow for notes to be taken, this blank page can be completely blank or have blank spaces in it as shown in Fig. 11, this blank page information then must be sent along with the rest of the print job to be printed on the sheet [examples shown in Fig. 10 and 12]) **are inputted; and**

printing means for printing an image represented by the image data inputted to the input means in accordance with the print control information (printer engine 17 performs the actual printing in accordance with print information; col. 5 lines 61-62);

the printing means setting an image area to be printed on the print sheet as a blank area in the case where the print control information including information indicating

Art Unit: 2624

inclusion of a blank page is inputted (print sheet including blank page is shown in Figs. 6, 10, and 12 in the cases where blank page information is inputted).

While Mori teaches the sending of data to and from a printer in Fig. 2 through a predetermined communication medium [col. 1 line 12] bi-directional [col. 5 line 17] interface 21, Mori does not specifically teach that this interface be **the IEEE (the Institute of Electrical and Electronics Engineers) 1394 standard which utilizes packets for sending data**.

Fukunaga teaches interfacing between a computer and a printer via **the IEEE 1394 standard** (Fig. 1A; col. 1 lines 42-50) **which utilizes packets for sending data** (packet example shown in Fig. 13).

It would have been known obvious to one of ordinary skill in the art to use the IEEE 1394 standard as the interface of Mori. The motivations for doing so include the facts that IEEE 1394 is fast, smart, and an industry standard. Because it is an industry standard, it would be advantageous for an inventor to include its functionality in order for the invention to communicate with other devices on the market. Further, since it is an industry standard, it is well adopted by large companies and would have been well known to those of ordinary skill in the art.

Regarding claim 8, the apparatus elements of Mori in view of Fukunaga as combined as obvious in the rejection of claim 7 perform all of the method steps of method claim 8. Thus, claim 8 is rejected for the same reasons as stated in the rejection of claim 7 above.

Regarding claim 9, the apparatus elements of Mori in view of Fukunaga as combined as obvious in the rejection of claim 1 perform all of the program steps of recording medium having a program stored therein claim 9. Further, Mori teaches in col. 1 lines 13-15 and 61-62 that the

Art Unit: 2624

invention provides for a storage medium for storing a computer readable program to perform the data processing methods of Mori. Therefore, claim 9 is rejected for the reasons stated in the rejection of claim 1 as implemented as a program.

Regarding claim 9, the apparatus elements of Mori in view of Fukunaga as combined as obvious in the rejection of claim 4 perform all of the program steps of recording medium having a program stored therein claim 9. Further, Mori teaches in col. 1 lines 13-15 and 61-62 that the invention provides for a storage medium for storing a computer readable program to perform the data processing methods of Mori. Therefore, claim 9 is rejected for the reasons stated in the rejection of claim 4 as implemented as a program.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US-6313919, Nakagiri et al., 11-6-2001 : teaches a printing control apparatus and method including blank page information and number of pages printed on a print sheet.

US-6833930, Nishikawa et al., 12-21-2004: teaches a printing control method and apparatus including blank page information and number of pages printed on a print sheet.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lucas Divine whose telephone number is 703-306-3440. The examiner can normally be reached on Monday - Friday, 7:30am - 5:00pm.

Art Unit: 2624

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on 703-308-7452. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lucas Divine
Examiner
Art Unit 2624

ljd


KING Y. POON
PRIMARY EXAMINER